

A Work Project presented as part of the requirements for the Award of a Master Degree in Finance
from the NOVA – School of Business and Economics.

EQUITY VALUATION
UNDER ARMOUR

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Abstract

A company's valuation is based on theoretical models and analysts' assumptions that intend to predict future events in the most reliable way. The present work project aims to estimate the fair value of Under Armour's stock at December 31st, 2020.

To perform this valuation, the Discounted Cash-Flow (DCF) was the primarily method used accompanied by a Multiples valuation.

The DCF valuation output is that Under Armour is undervalued by the market, having a target price of \$24.09 comparing to the price of \$21.85 as of 06/01/2019. Hence, the recommendation of Under Armour's equity valuation is a BUY recommendation.

Keywords

Performance, Sportswear, Valuation, Scenario

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UNDER ARMOUR INC

SPORTSWEAR

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COMPANY REPORT

6 JANUARY 2020

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Moving from defense to offense

Under Armour is back on track

- We initiate the coverage of Under Armour with a BUY recommendation given our YE20 target price of \$24.09, an upside of 10.3% relatively to the current price of \$21.85.
- Under Armour has been witnessing a slowdown over the past few years due to a struggling retail sector in the United States allied to an inefficient inventory management.
- The sportswear industry is expected to grow at a 6.9% CAGR for 2019-2024, mainly driven by the athleisure trend and by an increasing health-consciousness that is spreading worldwide.
- We forecast a 2019-2024 6.1% CAGR for UA's net revenues as the company will now capitalise on blending its values through innovation and technology, by aiming to an increasing focused performer connectivity and international expansion.
- **Valuation:** we computed a DCF valuation, forecasting net revenues by distribution channels and geographical segments, assuming a 4.9% WACC and a 3.8% terminal growth rate.

Company description

Under Armour, Inc. is an American sportswear company that develops, markets and distributes sports related performance products. The company operates in North America, EMEA, Asia-Pacific and Latin America. The Connected Fitness business offers both digital fitness subscriptions and digital advertising through its MapMyFitness, MyFitnessPal and Endomondo apps.

Recommendation: **BUY**

Vs Previous Recommendation

Price Target FY20: **24.09 \$**

Vs Previous Price Target

Price (as of 6-Jan-20) **21.85 \$**

Bloomberg: UAA US

52-week range (\$)	27.72-16.74
Market Cap (\$m)	9,231.7
Outstanding Shares (m)	451.53

Source: Bloomberg, Analyst's estimates



Source: Bloomberg

(Values in \$ millions)	2018	2019E	2020F
Revenues	5,193	5,297	5,683
Gross Profit	2,340	2,467	2,712
Net Profit	(46)	110	161
Dividends	-	-	-
EPS	(0.10)	0.25	0.35
P/E (X)	0	89	68
ROIC (%)	4.54	5.89	8.40
WACC (%)	4.90	4.90	4.90

Source: Bloomberg and Analysts' estimates

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Executive summary

UA intends to focus on performance consumers.

Under Armour, Inc. is a performance enhancing company that sells sports related products. UA had its IPO in 2005 and it is currently listed at the NYSE. The sportswear company has two classes of common stock: Class A, UAA, and Class C, UA, both integrated in S&P 500.

Nike and Adidas are the two main players of the Sportswear sector.

The company aims to be the number one in the competitive sportswear market, which is expected to grow at a 6.9% CAGR from 2019-2024. Under Armour's net revenues come mostly from North America, followed by EMEA, Asia-Pacific and Latin America. Regarding the product, apparel continues to be the core business line, followed by footwear and accessories. Under Armour's revenues are generated through wholesale, direct to consumer and licensing channels. Connected Fitness is seen as a growth driver for Under Armour, as the company is increasing its investment in this digital business line.

The struggling U.S. retail sector and an inefficient inventory management led to UA's operating losses.

Under Armour's growth has been decreasing especially since 2017, as the company's domestic market started to suffer in the retail sector. UA's business still relies heavily on North America, that generated 72% of the company's net revenues in 2018. The inefficient inventory management also slowed down Under Armour's growth, leading to operating losses in both 2017 and 2018.

We believe UA's restructuring process (2017-2019) is crucial for the company to adopt an offensive strategy.

The company recently faced a three-year restructuring process (2017-2019) to revert its situation, that ended with Kevin Plank, Under Armour's founder, recently stepping down as CEO remaining Chairman and Chief Brand Officer.

Contrarily to its rivals, Under Armour is not following the athleisure trend.

As the company's rivals are betting on the athleisure trend, Under Armour focuses on a performance consumer that is a \$92 billion addressable market. We see this focused performer and the international expansion mostly in the direct to consumer channel to be UA's main drivers for the future.

Under Armour faced a federal investigation in November 2019.

Under Armour faced a federal investigation in November 2019 over its accounting practices. The company "firmly believes that its accounting practices and disclosures were appropriate".

We forecast a 6.1% 5-year CAGR for Under Armour for the period of 2019-2024. Under Armour's net revenues will mainly come from the international business and from the increases in the focused performer spending, globally.

We forecast a \$24.09 target price for December 2020, a BUY recommendation.

Our UA's DCF valuation results on a BUY recommendation, with a price target of \$24.09 for Class A share. We believe that the company is going to be capable of getting back on track, achieving sustainable growth in the medium and long term.

Company overview

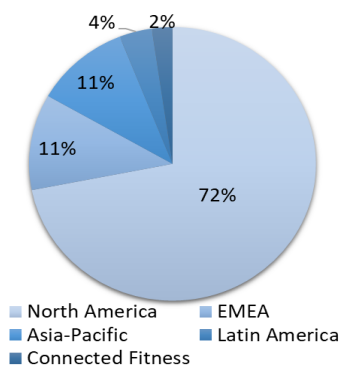


Under Armour, Inc. (UA) is a developer, marketer and distributor of sports related performance products. The company sells a broad offering of apparel, footwear and accessories through the wholesale, direct to consumer (DTC) and licensing channels. UA had its IPO in 2005 and it is currently listed at the NYSE. The company has three classes of common stock: Class A (UAA US Equity) Class B and Class C (UA US Equity). Both Class A and C are integrated in S&P 500. Under Armour is currently based in Baltimore, Maryland, U.S.

Company description

UA is a branded performance products company that offers apparel, footwear & accessories and has headquarters in Baltimore, U.S.

Exhibit 1: Net revenues by geography in 2018 (in % of total)



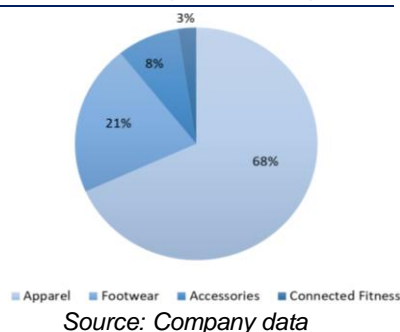
Source: Company data

Under Armour, Inc. is an American sportswear company that was founded in Washington, DC, on September 25, 1996, by its current Chairman and former Chief Executive Officer (CEO), Kevin A. Plank. The company soon moved to Kevin Plank's hometown in Baltimore, Maryland, where the founder grew up and became a fullback and specials teams captain at the University of Maryland's football team. Driven by better performance, Kevin Plank came up with a lightweight and sweat-wicking shirt that used a synthetic base layer in order to keep its teammates dry and cool on football games. Under Armour then started to focus on athletes apparel by creating products with a special fabric that increased performance regardless the climate conditions - products that would keep them cool when it was hot (HotGear® fabric) and that would keep them warm when it was cold (ColdGear® fabric). Later, the company introduced a mixed fabric that would keep athletes comfortable between extreme conditions (AllSeasonGear®).

Under Armour operates globally into four distinct geographical areas (exhibit 1): North America, Europe, Middle East and Africa (EMEA), Asia-Pacific and Latin America. The company sells a broad offering of apparel, footwear and accessories (exhibit 2) through its wholesale, direct to consumer and licensing channels (exhibit 3). Connected Fitness is the company's digital business line.

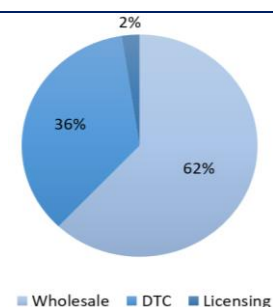
"The shirt that started it all. It was soft. It was skin-tight. It was stretchy. And, most importantly, it wicked sweat faster than anything else out there, keeping athletes cool, dry and light."
 Under Armour's website

Exhibit 2: Net revenues by business line in 2018 (in % of total)



Source: Company data

Exhibit 3: Net revenues by channel in 2018 (in % of total)



Source: Company data

Under Armour's Connected Fitness integrates all the company's fitness apps, namely MapMyFitness, Endomondo and MyFitnessPal.

The company first penetrated into the digital market in 2013, when it acquired MapMyFitness. In 2015, Under Armour amplified its presence in the business by acquiring Endomondo and MyFitnessPal. This community called Connected Fitness became the world's largest digital fitness brand in the world by 2017¹.

Under Armour reached \$5,193 million in net revenues in 2018, recording a year-over-year (yoy) growth of 4%. In 2017 and 2018 the company registered a net loss of \$48 and \$46 million, respectively, mostly due to its domestic business and inefficient inventory management. UA recently faced a three-year restructuring process (2017-2019) in which it intended to move from defense to offense to become a global leader in the sportswear industry.

On November 18, 2005, Under Armour went public with an Initial Public Offering (IPO) price of \$13. The company raised about \$157 million and nearly doubled its IPO price to a \$25 closing one, reaching a maximum price of \$31 during that day. UAA remained relatively constant over the past few years when compared to both the S&P500 and the MSCI Index (exhibit 4).

Under Armour's stock rose 3% on October 22, 2019, as the company announced that Kevin Plank would be stepping down as CEO.

Exhibit 4: Under Armour's share performance vs. S&P 500 and MSCI Index

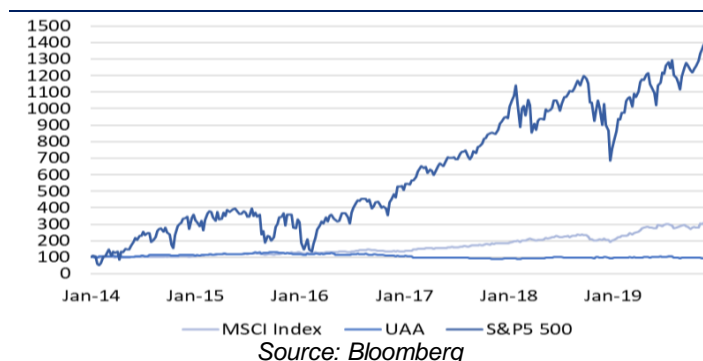
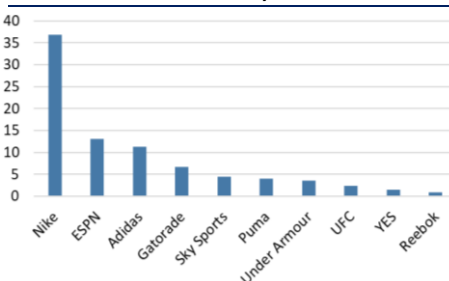


Exhibit 5: World's top 10 most valuable sports brands in 2019 (in \$ billion)



Source: Forbes

On January 1, 2020, Under Armour's founder Kevin Plank stepped down as the company's CEO. Kevin Plank will become the company's executive Chairman and Brand Executive, allowing him to work more directly with the brand's product and marketing². Under Armour's President and former Chief Operating Officer Patrik Frisk has been named CEO.

Under Armour always focused on innovative athletic performance products and experiences as it did not change its mission throughout the years: to make all athletes better through passion, design and relentless pursuit of innovation. The company became the 7th most valuable sports brand in the world in 2019, according to Forbes (exhibit 5).

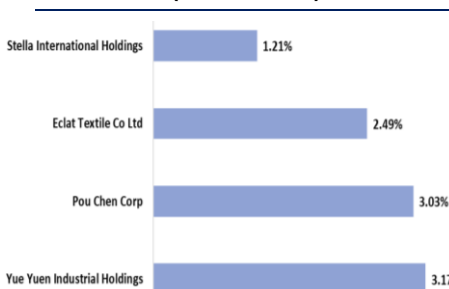
¹ High, Peter. 2017. "Under Armour Is Now The Largest Digital Health And Fitness Company On Earth". *Forbes*, September 18. <https://www.forbes.com/sites/peterhigh/2017/09/18/under-armour-is-now-the-largest-digital-health-and-fitness-company-on-earth>

² Source: Quartz at Work

Supply Chain

UA develops its raw materials through third parties settled in low labour cost countries.

Exhibit 6: Under Armour's suppliers (in % of total)

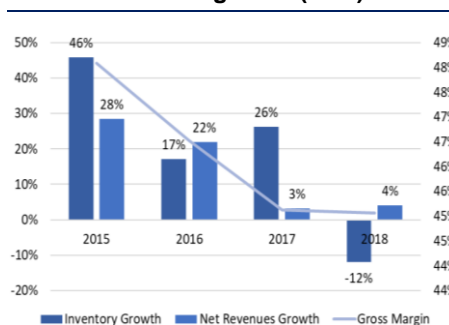


Source: Bloomberg

Under Armour's raw materials include petroleum based products and cotton. These are developed by third parties that are based in low labour cost countries, such as China, Vietnam and Jordan, which allows the company to substantially reduce its costs and consequently increase its margins. UA's main suppliers are Asian manufacturing companies such as Yue Yuen Industrial Holdings and Pou Chen Corporation (exhibit 6).

Under Armour's fast growth over the past few years also had its drawbacks considering its supply chain efficiency. In 2017, according to Colin Browne, UA's Chief Supply Chain Officer, the company had the highest number of stock keeping units (SKUs) ever observed, recording about 690,000 SKUs. Under Armour's inventory levels consequently increased by 26% in 2017, a growth that was not followed by a proportional increase in net revenues, that rose only 3% in the same year. This rise of unsold inventory levels damaged the company's gross margin in 2%, reducing from 47% in 2016 to 45% in 2017 (exhibit 7).

Exhibit 7: Inventory growth vs. Net Revenues growth (in %)

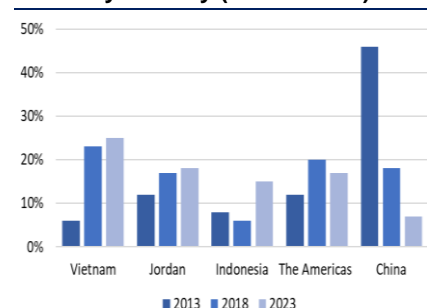


Source: Company data

Considering the challenges faced by Under Armour up to 2017, the company developed a restructuring plan, aiming mostly at the efficiency of its supply chain and focusing on a new strategy to reduce unsold inventory levels. To do so, UA reduced its SKUs by 40%, recording about 415,000 units in 2018³, allowing UA to focus on the products that are more profitable. Consequently, the inventory levels decreased about 12% in 2018 (exhibit 7). Also, the number of different materials used to develop products alongside with UA's number of vendors was reduced by 75% and 30%⁴, respectively, allowing Under Armour to order products from more specialized partners at a lower price per unit, increasing the company's expected gross margin in 2019 to 46%.

The company created a restructuring plan to increase its margins.

Exhibit 8: Under Armour's sourcing by country (in % of total)



Source: Company data

Regarding the distribution of the supply sources, we can state Vietnam, the Americas, China and Jordan as Under Armour's main sources of supply (exhibit 8). Vietnam accounts for 23% of UA's total sourcing, a number that the company expects to increase to 25% in 2023, mostly due to the country's continued fast growing trend in the manufacturing sector observed in the last few years⁵. In 2013, 43% of what Under Armour acquired from its suppliers came from China. This dependency on the Chinese market has been reducing over the last few years, with China representing about 18% of sourcing in 2018 as the company

³ Source: Under Armour Investor Day 2018

⁴ Source: Under Armour Investor Day 2018

⁵ Shoulberg, Warren. 2019. "Vietnam Is Becoming The Big Winner In The China Trade Wars". *Forbes*, October 16. <https://forbes.com/sites/warrenshoulberg/2019/10/16/us-finally-succeeds-in-vietnam-as-more-companies-move-sourcing-there>

Under Armour's sourcing is expected to decrease its dependence upon China and the Americas.

UA's diversified supply chain reduces the company's exposure to economic and geopolitical instability.

Under Armour has three different types of stock classes: Class A, Class B and Class C.

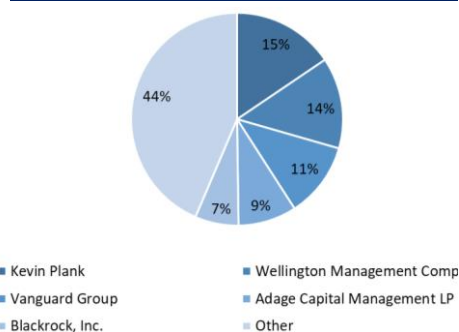
tries to minimize its exposure to China trade risk and limit the impact of the trade tensions between the U.S. and China in the company's operating activity. Under Armour predicts this trend to continue, expecting the sourcing from China to be about 7% by 2023. The Americas region accounts for 20% of UA's sourcing, a number that is expected by the company to be reduced to 17%. Regarding Jordan, we can state that it has become increasingly more relevant in UA's sourcing since 2013, accounting for 17% in 2018, and the company expects it to reach 18% by 2023. We believe this positive trend comes as a result of the free trade agreements for the manufacturing sector that Jordan signed with both the EU and the U.S., from which Under Armour can benefit when ordering products to be delivered in those regions. Also note that Indonesia is expected by the company to increase its weight on UA's sourcing from about 6% in 2018 to 15% in 2023. The diversification of Under Armour's supply chain alongside with its efficient management allows the company to better manage its inventories and optimize its cost of goods sold. The supply chain is a major driver for the gross margin and for service optimization, fundamental for UA's intentions to become a global leader.

Stock classes and structure

Under Armour has currently three different types of stock classes. Two of them are publicly traded on the New York Stock Exchange (NYSE): Class A with the ticker UAA (1 vote per share), and Class C under the ticker UA (no voting rights). The shares of Class B common stock are not publicly traded and are held by UA's founder Kevin Plank and entitle 10 votes per share. As of January 31, 2019, there were 187 million Class A, 34 million Class B Convertible Common Stock and 227 million Class C shares outstanding.

Under Armour does not intend to pay cash dividends in a foreseeable future⁶ contrarily to its competitors: Nike pays quarterly dividends, whereas Adidas and Puma pay them on an annual basis. Also note that Under Armour has Kevin Plank (15%), Wellington Management Company (14%), the Vanguard Group (11%), Adage Capital Management (9%) and Blackrock Inc. (7%) as the major holders (exhibit 9).

Exhibit 9: Shareholder's structure (in % of total)

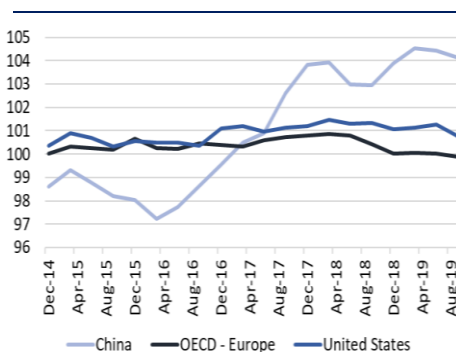


Source: Bloomberg

⁶ Source: Under Armour annual report 2018

Economic overview

Exhibit 10: Consumer confidence

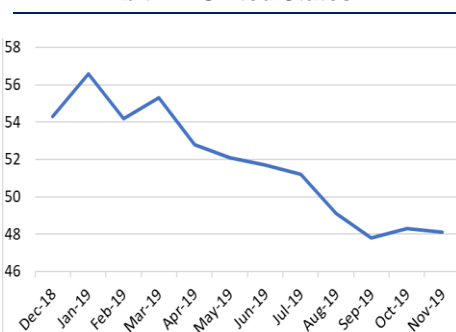


Source: OECD

As a worldwide brand, Under Armour is exposed to potential weakening of economic conditions that could reduce both demand and consumer spending on the company's products. We believe that the consumer confidence, the Purchasing Managers Index (PMI) and the unemployment rate are the main economic indicators related with Under Armour's future performance.

In exhibit 10, we can observe the consumer confidence of China, the United States and Europe. This indicator has been increasing in China since April 2016, indicating the Chinese consumers are becoming more confident on future economic conditions and willing to increase their consumption spending, a good indicator for Under Armour's future growth. In the United States we see an incremental decrease in consumer confidence in the last quarter. However, it is still above 100, indicating the American consumer still has confidence above the long-term average. In Europe, similarly to the United States, the consumer confidence has been constant over time by the long-term average of 100, stating relatively stable economic conditions in a foreseeable future in the region.

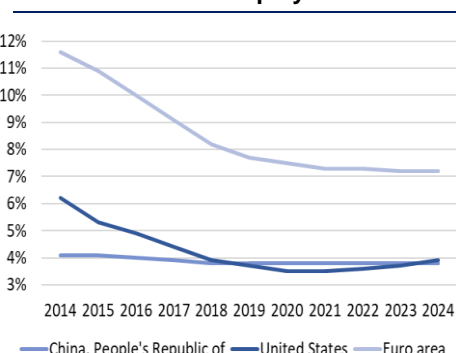
Exhibit 11: United States PMI



Source: Institute for Supply Management

The Purchasing Managers Index (PMI) is a leading indicator regarding future economic trends. It indicates manufacturers' production based on demand forecasts. During last year, the United States' PMI has been decreasing, indicating a potential lower demand for the American market. However, it is important to highlight that if an economy is considered healthy whenever its PMI is above 42.9⁷. Therefore, with a current PMI of 48.1 (exhibit 11), we believe the American economy will continue to grow in the near future, in line with the consumer confidence predictions stated above.

Exhibit 12: Unemployment rate



Source: IMF

The unemployment rate (exhibit 12) is a crucial indicator as it affects a consumer's personal income and thus, its consumption. This indicator has been decreasing generally over the past few years. The IMF expects this trend to continue especially in the United States, predicting a healthy economy for the next few years. The Euro Area has unemployment rate above 8%, and it is not expected to decrease the 7% level over the next few years, meaning that its consumers will have incentives to save more when compared to other regions. The unemployment in China has been fairly constant over the past few years over the values of 4% indicating future economic stability for the country.

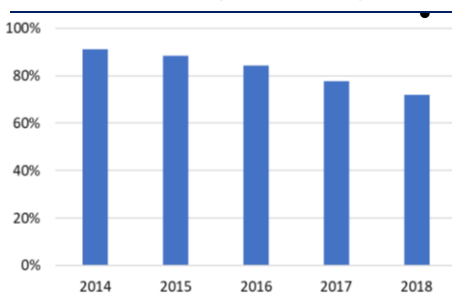
⁷ Institute for Supply Management. 2019. "November 2019 Manufacturing ISM." Accessed December 3. <https://instituteofsupplymanagement.org/about/MediaRoom/newsreleasedetail.cfm?ItemNumber=31160&SSO=1>

Key topics

Under Armour has been, in the past few years, one of the fastest emerging sportswear companies in the apparel and footwear industries. The company is facing some drawbacks mostly due to its domestic business and inventory management, and we see the following as the primary key topics in the future.

The North America challenge

Exhibit 13: North America net revenues (in % of total)

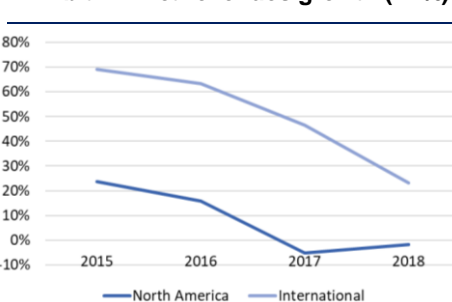


Source: Company data

The North America geographical segment comprises two directly operated countries, namely the United States (92%) and Canada. The region grew at an 8% 2014-2018 CAGR, generating 72% of Under Armour's net revenues in 2018. Under Armour runs 185 stores and two websites in North America, and it is present in about 13,500 distribution points, being available in about 40% off all the places where consumers can buy athletic apparel and footwear.⁸ Despite having a high dependence upon its domestic business, Under Armour is slowing reverting this trend (exhibit 13). North America is decreasing its net revenues yoy, inclusively reporting an operating loss of \$66 million in 2018 caused by struggling retail market in the region. UA's most relevant geographical market represents a \$98 billion athletic apparel and footwear market, of which \$29 billion are allocated to Under Armour's target consumer: the focused performer⁹.

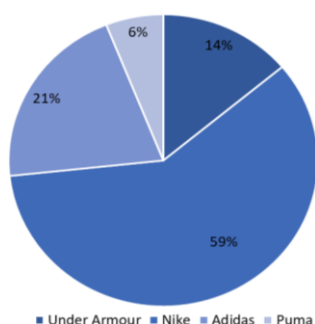
To improve the North American business is crucial to UA's turnaround. The company intended to use its domestic business strength to fuel its global ambition. However, changes in consumer preferences (mostly driven by the athleisure trend) and internal intensified competition in the region impacted negatively Under Armour's North American business, that consecutively reported lower revenue growth rates than the international business (exhibit 14). As we can observe in exhibit 15¹⁰, Nike is the market leader in North America, followed by Adidas and Under Armour. We believe that the focused performer is now a huge opportunity for Under Armour as the North American consumer is becoming more and more active with more gym memberships (exhibit 16) and more engaged to sports and to a healthy lifestyle. Of the \$29 billion focused performer market, \$7 billion are spent on footwear¹¹, making this business line one of the biggest opportunities regarding the focused performer in North America. The footwear business accounted for 60% and 50% of both Nike's and Adidas' sales, while Under Armour generated 21% of its net revenues through this business

Exhibit 14: Net revenues growth (in %)



Source: Company data

Exhibit 15: North America market share (in %)



Source: Passport – Euromonitor

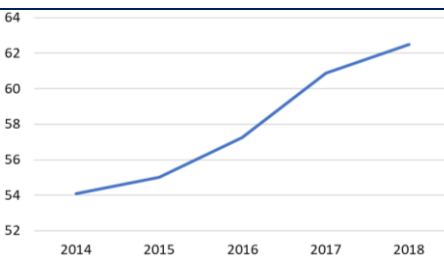
⁸ Source: Under Armour Investor Day 2018

⁹ Source: Under Armour Investor Day 2018

¹⁰ Relative to Under Armour's comparables

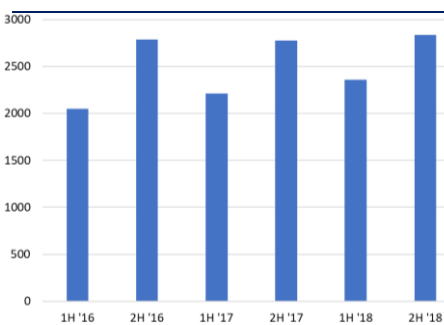
¹¹ Source: Under Armour Investor Day 2018

Exhibit 16: Memberships at health clubs in the U.S. (in million)



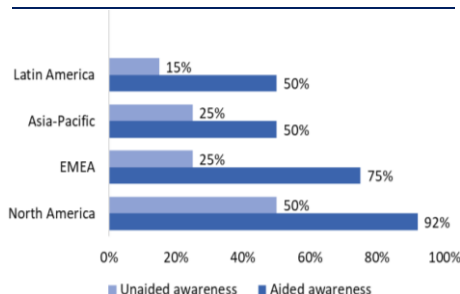
Source: IHRSA

Exhibit 17: Quarterly revenues (in \$ million)



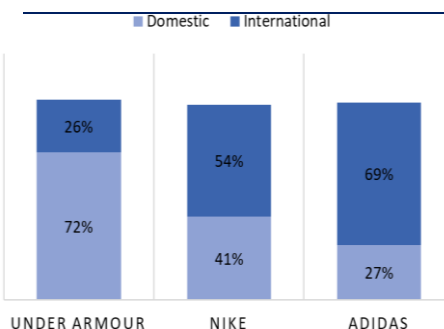
Source: Company data

Exhibit 18: Brand awareness (in %)



Source: Company data

Exhibit 19: Net revenues in 2018 (in % of total)



Source: Companies data, Analysts' estimates

line. The footwear business is also an opportunity for the company to balance seasonality as the company's revenues tend to increase during the 2nd half (2H) of the year (exhibit 17), and UA launches its shoes typically in the beginning of the year. Also, with the recent nomination of Stephanie Pugliese as North America President, UA expects to regain market share to its competitors in the region.

International expansion

The international expansion is the best way for Under Armour to offset a sluggish North America segment. The brand is underrepresented outside its domestic business when compared to its competitors, as its brand awareness has a lot of room for improvement at the international level (exhibit 18). The international business includes Asia-Pacific, EMEA and Latin America. It generated 9% and 26% of UA's net revenues in 2014 and 2018, respectively. The segment grew at a 49% CAGR during 2014-2018, and we expect it to be one of the primary expansion growth opportunities for Under Armour's net revenues.

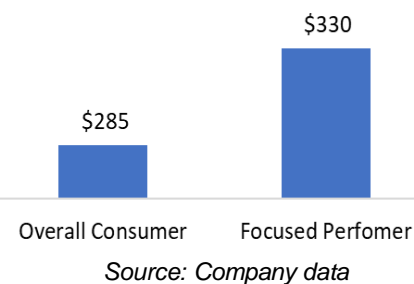
Under Armour intends to build a global brand. In 2018, to drive international expansion, the company appointed Jason Archer, Manuel Ovalle and Massimo Baratto as new managing directors for Asia-Pacific, Latin America and EMEA, respectively. Additionally, UA announced the expansion of its Hong Kong office to serve as its Asia-Pacific headquarters as well as new regional headquarters in Amsterdam. Under Armour clearly intends to balance its domestic with its international business. However, in opposition to its competitors, most of UA's revenues are generated in its domestic business, as we can observe in exhibit 19¹². Adidas' and Nike's international business accounted for 69% and 54% of the companies' net sales in the last fiscal year, whereas UA's international segment accounted only for 26%. As Under Armour's North American business started to collapse, the company started to aim at the international segment to stimulate growth as it has several growth opportunities that will be further explained in the sector overview. However, international expansion has also its costs and drawbacks. To operate in a large number of countries implies concerns when it comes to consumers' cultural differences, that can influence their preferences. Thus, a company can incur on the risk of recording unexpected high amount of unsold inventory and consequently decrease the company's margins. A firm may also face economic costs when it intends to internationalize, by getting its revenues, margins and results exposed to volatility recorded by a certain country's or region's exchange, interest and inflation rates.

¹² Adidas' domestic business is the European one

Focused Performer

The focused performer is a new type of consumer that is growth opportunity for UA.

Exhibit 20: Average spending last 6 months, as of December 2018 (in \$)

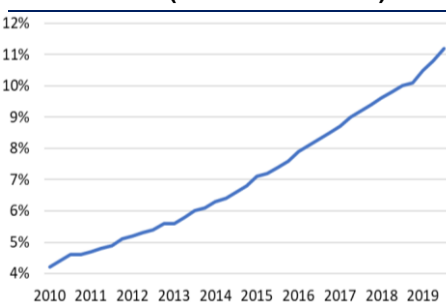


While its competitors appear to follow the athleisure trend, Under Armour is focusing on performance enhancing sportswear. The brand created a strong worldwide reputation in this matter with the help of ambassadors such as Dwayne "The Rock" Johnson. UA drives this performance through innovation and premium experiences to stretch the boundaries of what is possible. Naturally, a performance company needs high-performance consumers. Being so, Under Armour recently started to focus on a consumer whose ideas align with the company's purpose: the focused performer. The focused performer is an athlete who is hardwired to fight and sees every barrier as an opportunity to reach their goals and ultimately get better. This target consumer only cares about performance apparel when it can really make a difference, and style is a part of this. The focused performer is an absolute new type of consumer: it is younger, more diverse when it comes to gender - 50% male and 50% female - and ethnicity - +3% vs. overall consumer; it is more active, with running and training as daily top activities¹³; and, most importantly, tends to spend more money, as we can state in exhibit 20. It is also a \$92 billion addressable market. The way to engage this type of consumer is fundamental to increase revenues. To keep the focused performer on top on all UA's decisions and to understand each and every one of them by creating a personalized experience with the help of social media interaction is crucial to drive the company's growth.

Digital

The digital's business goal is to strengthen Under Armour's relationship with the focused performer. The digital trend is one of the major opportunities not only for Under Armour but also for every sportswear firm in the industry since consumers are becoming more connected to technology and with all it has to offer. In the sportswear sector, Adidas is closing stores and stepping up investment in digital to increase its e-commerce sales¹⁴ and Nike intends to make digital an advantage by creating a personalized and unique experience of its own through its website and applications development¹⁵. This digital trend is being reflected worldwide. In the U.S e-commerce retail sales are becoming a considerable part of companies' sales (exhibit 21). The digital trend is also booming in China

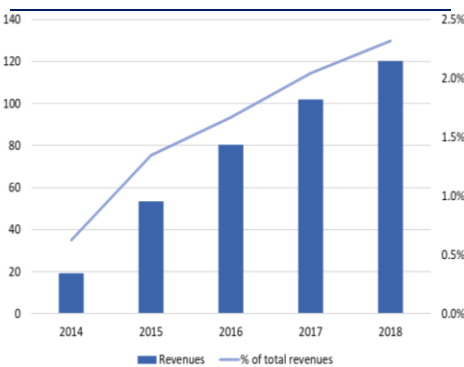
Exhibit 21: E-commerce retail sales in the U.S (in % of total sales)



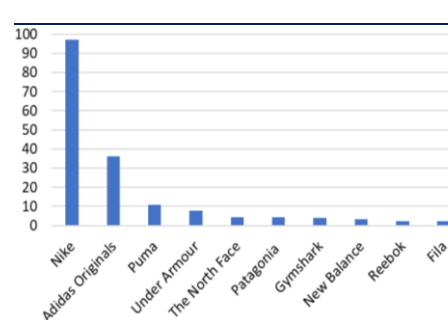
¹³ Source: Under Armour Investor Day 2018

¹⁴ Source: Adidas annual report 2018

¹⁵ Source: Nike annual report 2019

Exhibit 22: Connected Fitness net revenues (in \$ million and % of total)


Source: Company data

Exhibit 23: World's top 10 most popular brands on Instagram (in millions of followers)


Source: ISPO

The combination of physical and digital is a trend that will most probably continue in the future.

Through Armourbox, the consumers save time and effort of finding the type of gear that suits them.

especially due to the increase in household ownership broadband connection from 72% in 2017 to 82% in 2018¹⁶.

Under Armour's fuel are the consumers, namely the focused performers. For its strategic growth plan, UA intends to organize itself by becoming consumer centric. In that sense, the digital business is crucial. UA is engaging with the focused performer through several channels. Firstly, the company's website. It is the digital flagship and the core of Under Armour's e-commerce experience. Secondly, UA's app is the ultimate shopping experience made for the focused performers. Those who have the app shop twice as often as those who do not, with a 20% higher average order value¹⁷. UA intends to take the consumers' data from Connected Fitness in order to better understand them and provide them a unique experience. Connected Fitness (exhibit 22) recorded a 58% CAGR between 2014 and 2018, and we believe that this trend will continue in the future as the digital business evolves. In the Connected Fitness business line Under Armour offers digital fitness subscriptions as well as digital advertising through its MapMyFitness, MyFitnessPal and Endomondo apps. MapMyFitness (acquired in 2013) offers the fitness community a way to record and store their fitness activities. MyFitnessPal provides a way to track its users' nutritional information and it is the number one grossing health and fitness app in Apple store and number two in Google store¹⁸. The digital business is fundamental to the consumer engagement, that is increasingly becoming more social, with Instagram turning a powerful marketing tool for sports brands (exhibit 23).

The company is connecting the digital business to the non-digital one, in order to increase its revenues. UA's HOVR footwear technology is a perfect example of the digital trend that the company is following. This innovative footwear is digitally connected to MapMyRun¹⁹, gathering all the athlete's information with the Under Armour's footwear, creating a full consumer experience. Another example of Under Armour's digital business is Armourbox, a box that provides athletes with the apparel and accessories chosen by Under Armour according to their subscribers' preferences. With this product, the company intends to pick the gear, in order for the consumer to get better. This way, the athlete or performance consumer can focus only on perform, look, and ultimately feel better.

¹⁶ Euromonitor International. 2019. "Digital Landscape in China." Retrieved from Passport database <http://www.portal.euromonitor.com>.

¹⁷ Source: Under Armour Investor Day 2018

¹⁸ SensorTower. 2019. "Top Grossing Health & Fitness Apps Worldwide for October 2019." Accessed December 4. <https://sensortower.com/blog/top-grossing-health-and-fitness-apps-october-2019>

¹⁹ Included in MapMyFitness

Innovation

UA's right and appropriate culture is fundamental for an innovative environment.

Under Armour's history of successful innovations shaped the company towards what it is today. UA's objective is not only to just create new products, but also to change the way people exercise and live, providing them solutions "you never knew you needed and cannot imagine living without"²⁰. To do so, we believe one of the most important drivers of innovation is a company's culture. Under Armour's innovative environment attracts creative people and incentivizes them to come up with new ideas that can make an impact and drive up the value of the company. These ideas are built upon a go-to-market approach developed under UA's restructuring process, crucial to turn these ideas and innovations into value for the firm. Note that even under this restructuring process, Under Armour continues to follow an innovation path instead of a more conservative approach that would possibly present better short term results.

HOVR and Athletic Recovery are two examples of innovative and revolutionary products created by Under Armour.

Under Armour's innovation can be easily observable in its products, of which we highlight UA HOVR and UA's Athletic Recovery. HOVR, as previously stated, is the major innovative product Under Armour has from its footwear sector. While it is also focused on making the athlete comfortable, what makes this shoe innovative is that it is connected with MapMyRun, UA's run tracking app. Using these shoes, the app will give the wearer tips on how to improve the performance and reduce the risk of injury using the data the shoes collected. The Athletic Recovery uses far infrared technology imbued in its apparel products. Under Armour created a set of clothing, such as shirts, leggings, underwear and jackets that can be used to improve the muscles recovery and strength. Initially thought to be used during sleep, these clothing can also be used during the day.

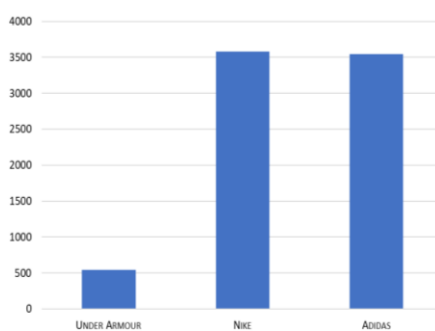
The Sector

Under Armour competes in the sportswear sector, characterized by its fierce competition.

Under Armour competes in the sportswear sector which includes the manufacturing and retailing of sporting goods, such as athletic apparel, footwear, accessories and equipment. This sector is characterized mainly for its high competition, fragmentation and for having many market niches.

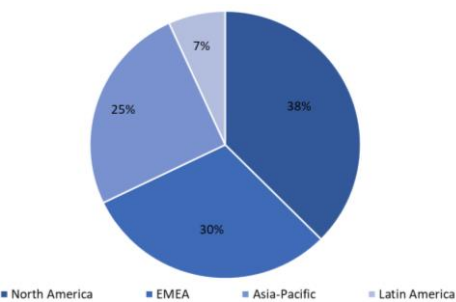
A product's quality, design and price, alongside with the brand awareness and effectiveness of distribution channels drives competition within this sector. However, not all companies have the power to compete with the sector's two

²⁰ Kevin Plank, Under Armour 2018 Investor Day

**Exhibit 24: Marketing costs in 2018
(in \$ million)**


Source: Companies data

major players, Nike and Adidas²¹. These billion dollar companies have proved to be in the vanguard year over year, with innovative, stylish and revolutionary products that change the consumer preferences on a regular basis. The necessary large capital investment in both innovation and research and development (R&D) is one of the high entry barriers within the sportswear sector, and partially protects the incumbents from external competition. Also, marketing is seen as an important value driver and thus, companies like Nike and Adidas incur on significant high marketing costs (exhibit 24) when compared to their peers to increase their brand awareness relatively to their customers. The considerable number of firms in the sector leads to the consumers' high bargaining power. This way, differentiation from its competitors is fundamental if a company intends to succeed in the sector. Similarly, the abundant number of potential suppliers lead to a company's high bargaining power considering the supplied raw materials²².

Exhibit 25: Sportswear by region (in %)


Source: Passport - Euromonitor

Globally, the sportswear sector grew at a 4.5% CAGR from 2014 to 2019, reaching a market size of \$354 billion in the latter. This growth is expected to continue as it is predicted a 6.9% CAGR from 2019 to 2024, with a market size of \$494 billion²³. The sportswear industry includes both the sports apparel and footwear categories, that accounted for 60% and 40% of the total market in 2018, respectively. Geographically, the sector has a higher market share in North America, followed by EMEA, Asia-Pacific and Latin America (exhibit 25).

North America is the largest region for sportswear, as it generated 38% of the industry's global sales, with the United States alone accounting for 36%. This is the region in which most fashion trends begin and then spread worldwide, as the athleisure trend. Although the region has been suffering from lower retail demand, it has the highest per capita spending in the category²⁴. The increasing concern for health (exhibit 16) is driving the region's demand for sportswear, expected by Euromonitor to grow at a 6% CAGR from 2018 to 2023.

China and India are the two key markets of the Sportswear sector in Asia-Pacific.

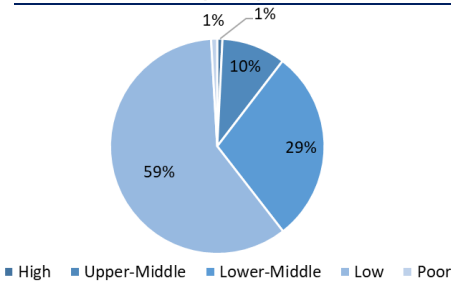
The sportswear industry in Asia-Pacific is expecting strong growth in the upcoming years according to Euromonitor, with an estimated 9% CAGR from 2018 to 2023. China and India are the two key markets at the forefront of future growth opportunities in the region due to powerful emerging connection to sports

²¹ Essays, UK. (November 2018). Competition in the sportswear industry. Retrieved from <https://www.ukessays.com/essays/marketing/competition-in-the-sportswear-industry-marketing-essay.php?vref=1>

²² Essays, UK. (November 2018). Competition in the sportswear industry. Retrieved from <https://www.ukessays.com/essays/marketing/competition-in-the-sportswear-industry-marketing-essay.php?vref=1>

²³ Euromonitor International. 2019. Retrieved from Passport database <http://www.portal.euromonitor.com>.

²⁴ Euromonitor International. 2019. "World Market for Apparel and Footwear." Retrieved from Passport database <http://www.portal.euromonitor.com>.

Exhibit 26: China's economic classes (in %)


Source: Pew Research Center

Exhibit 27: Sportswear sales in China (in billion yuan)


Source: ChinaPower

The heterogeneity of the European market makes it harder for sportswear firms to grow.

Latin America will become an attractive market for the sportswear firms to grow.

Athleisure is one of the main trends in the industry. However, UA does not intend to follow this movement.

and explosive middle class growth²⁵. China has a vast growth potential as its government is implementing policies to promote sports participation such as the increasing number of non-profit public fitness activities²⁶. Also, the country's middle class has been one of the fastest growing in the world, swelling from 2% in 1992 to 39% in 2019 of the country's population (exhibit 26). The country's sales of sportswear have also been increasing on an annual basis (exhibit 27). India is set to become the third largest apparel and footwear market in the next five years, due to the country's young demographic profile that drives and increases sportswear demand. Under Armour intends to penetrate in the Indian market as it recently opened its first brand store in the region, intending to open 9 more in the region, crucial for the company's international growth ambitions.

EMEA is characterized by its heterogeneity since the region is constituted by several countries, such as France, the UK and Germany, each one representing a market with its own different characteristics. The sportswear market in Europe is characterized by a fierce price competition mainly in the athleisure market, which offsets the positive effect of growing demand caused by increasing health awareness. Being so, we believe Under Armour's focus in performance over the athleisure trend can be vital for the firm's growth in the region, as it will allow the company to differentiate from its competitors and step away from this price war. The region is expected by Euromonitor to grow at a 3% CAGR from 2018 to 2023.

In the last the last few years, the sportswear sector has been evolving in an unstable way in Latin America. This is primarily due to economic crisis that decreased the region's GDP, affecting negatively the revenues of sportswear brands in Latin America. Moving forward, IMF forecasts for the GDP foresee more stable growth for the future, so we believe this will become an attractive market for sportswear companies to grow. According to Euromonitor, Mexico will be the main driver of sportswear growth in Latin America, becoming the largest market in the region by 2020. The region is expected by Euromonitor to grow at a 4% CAGR from 2018 to 2023.

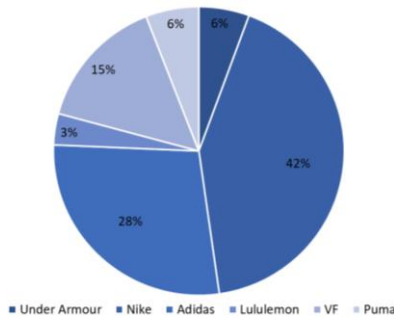
This continuous worldwide growth is being supported mainly by the athleisure and women's trend, as well as by an increasing engagement with fitness and health consciousness worldwide.

The Athleisure trend refers to a fashion trend characterized by wearing athletic apparel or footwear that is both comfortable and aesthetically appealing in daily

²⁵ Garret, Olivier. 2018. "The 3 Biggest Trends That Will Drive Gold In The Next 30 Years". *Forbes*, June 20. <https://forbes.com/sites/oliviergarret/2018/06/20/the-3-biggest-trends-that-will-drive-gold-in-the-next-30-years/>

²⁶ Dreyer, Mark. 2018. "The future direction of China's sports policy". *China Sports Insider*, March 12. <http://chinasportsinsider.com/2018/03/12/future-direction-chinas-sports-policy/>

Exhibit 28: Athleisure North America market share



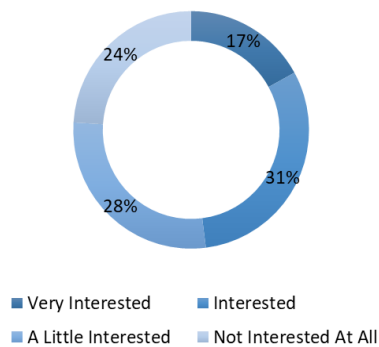
Sources: Passport – Euromonitor, Companies data

Women are no longer accepting the “pink it and shrink it” strategy. They want choices and options thought for them.

activities. The relaxation of dress codes over the past decade has played a huge role in the rise of athleisure. It has become socially acceptable to wear casual and even sportswear clothing to formal occasions or events. The global athleisure market size was valued at \$300 billion in 2018 by Grand View Research and expected to reach \$350 billion by 2020 by A.T. Kearney. As it is observable in exhibit 28, Nike and Adidas detain a considerable share of the North American Athleisure market with 42% and 28%, respectively. Under Armour only represents 6% since it does not intend to be a part of this movement, as its focus relies only on developing performance products. Note that Lululemon took a major role fuelling the athleisure movement.

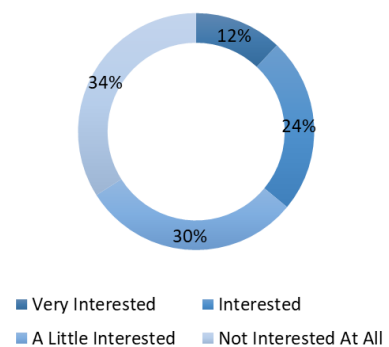
Sports is one of the most important means to promote gender equality and to empower women. Under Armour endorses female athletes such as the ballet dancer Misty Copeland, the soccer player Kelley O'Hara and the ski racer Lindsey Vonn. Due to cultural evolution, gender equality the trend is reverting, and more women have been practicing sports. Women are becoming more interested in sports (exhibits 29 and 30), making them a new target consumer for companies. Such reduction in the gender disparity in sports led to an increase in the number of potential clients for the sportswear industry. This increase has been very well exploited by Lululemon, that was a pioneer in the athleisure trend targeting especially the growing female market.

Exhibit 29: Women interest in sports (under 50 years)



Source: Report “Women and Sport”, Nielsen, 2016

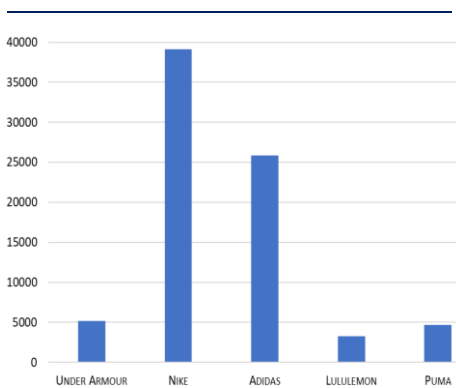
Exhibit 30: Women interest in sports (over 50 years)



Source: Report “Women and Sport”, Nielsen, 2016

Comparables

Nike and Adidas are undoubtedly the major players within the sportswear industry, recording much higher net revenues comparing to its competitors.

Exhibit 31: Net revenues (in \$ million)

Source: Companies data

Exhibit 32: World's biggest endorsement deals (in \$ million)

ATHLETE	BRAND	YEARLY
Michael Jordan	Nike	\$ 60.0
Lebron James	Nike	\$ 30.0
Kevin Durant	Nike	\$ 28.5
Cristiano Ronaldo	Nike	\$ 21.7
Lionel Messi	Adidas	\$ 20.0
Tiger Woods	Nike	\$ 20.0

Source: Total Sportek

The two sportswear giants endorse celebrities such as Michael Jordan, Tiger Woods and Cristiano Ronaldo in Nike's case, and Lionel Messi, James Harden and Justin Rose in Adidas' case.

Nike (NKE US Equity) is the market leader in the sportswear industry as it continuously records considerable higher revenues than competitors (exhibit 31). The American company endorses some of the world's most valuable athletes (exhibit 32) as it sells under the NIKE, Jordan, Hurley and Converse brands, giving it a wide scope for brand positioning. Despite the slowing revenue growth, Nike considers itself a growth company as it intends to transform its strategy towards innovation. through large investments in R&D. The company is also investing in the digital market to improve consumer experience by focusing on its website and Nike+ apps, as well as in the Chinese market, in which Nike defined Beijing and Shanghai as two of twelve global cities to focus on.

Adidas sells sports apparel in more than 160 countries. The German sportswear company is Nike's biggest rival as it is one of the top sporting goods manufacturers worldwide. It sells under the adidas and Reebok brands, limiting the company's scope for brand positioning when compared to Nike. Footwear is Adidas' biggest and fastest-growing product category, accounting for 60% of sales. The company intends to bet on the digital trend, having inclusively reduced the number of physical stores over the last few years, and it also intends to expand its international business in North America. Adidas spends half of its marketing budget on sponsorship deals, focusing mostly on soccer players and teams such as Leonel Messi, Bayern Munich and Manchester United.

Even though they are growing, Puma's revenues are far from its two biggest competitors' as the German company was not able to be as innovative as the aforementioned. The firm focus on shoes, while apparel accounts for a growing small portion of sales. Puma also tries to associate itself with word tier sportsmen and teams, having this year signed a sponsorship with Manchester City.

▪ Multiples valuation

Even though the DCF is one of the most widely used valuation model due to its accuracy, we performed a multiples valuation to complement the former.

For this analysis, Nike, Adidas and Puma were the competitors chosen since these are the ones that have the same segments of revenues that come from the selling of the same type of products, and also that have an equivalent business model towards a similar consumer, driven by innovation. We used the Enterprise Value to EBITDA ratio as we believe it is the most relevant multiple. We reached

Adidas, Nike and Puma were the UA's competitors chosen.

EV/EBITDA valuation states that Under Armour is currently overvalued by the market.

Exhibit 33: Multiple valuation

COMPANY	EV/EBITDA
Under Armour	28x
Nike	29x
Adidas	20x
Puma	24x

Source: Bloomberg, Analysts estimates

The method used to value UA was the Discounted Cash Flow method.

an Under Armour's share price of \$19.98 for Class A, a SELL recommendation, as the company has a higher multiple when compared to its peers (exhibit 33).

Valuation

Our valuation of Under Armour is made using the Discounted Cash Flow (DCF) method. This method discounts the free cash flow of the firm at the weighted average cost of capital (WACC), in order to estimate the value of the company's stock by December 31, 2020. To do so, we analysed past data from 2014 to 2018 and forecasted results from 2019 to 2024. The terminal value is computed to project the value generated after 2024.

Forecasts

Exhibit 34: Revenue drivers

Wholesale

- Number of focused performers
- Consumer spending

DTC retail

- Brand & factory houses
- Revenues per house

Revenues

First of all, it is fundamental to estimate revenues with the maximum precision to the company's valuation since several other captions on the financial statements depend upon them, being of major importance to our forecasts and valuation. The sportswear sector trends are very difficult to estimate as the consumers' preferences are constantly changing. Hence, we believe a company's ability to foresee and follow those trends will determine its growth in the future.

We started to breakdown Under Armour's net revenues by distribution channels, moving deeper to geographical segments within each channel. Note that, as previously stated, Under Armour operates in North America, EMEA, Asia-Pacific and Latin America, using the wholesale, DTC and licensing channels.

Under Armour intends to continue to be a premium and performance brand, and it is strongly investing on its own performance niche instead of following the athleisure trend. The company's increasing focus on the consumer is now strongly embedded in its culture and daily operations²⁷. As previously stated, the focused performer is a new type of consumer that is determined to win in athletic performance, and we believe it is one of UA's value drivers for the future. Being so, our estimations regarding the wholesale business within each region rely upon this focused performer. The wholesale channel accounted for 62% of Under Armour's net revenues in 2018, a number that has been decreasing every year since 2014, when this type of distribution represented 67% of the company's sales. We strongly believe in this decreasing tendency and importance of the wholesale in detriment of the direct to consumer channel (exhibit 35). Under

We assumed the focused performer as revenue driver for the wholesale channel.

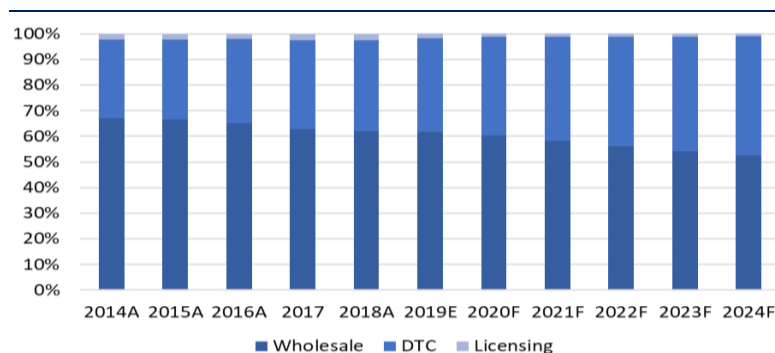
²⁷ Under Armour's mission is to Make You Better

We believe that the wholesale channel will decrease in % of net revenues.

Armour is making efforts to mix these two types of distribution channels not only to increase margins but also to have more control over the selling price as well as over the message it intends to pass to its consumers, in order to increase brand awareness. For our forecasts, we focused on the yearly spending of a focused performer on Under Armour's wholesale as well as on the increasing number of focused performers within each region. According to UA, the focused performer spends, on average, 16% more on athletic apparel and it is younger than the so called overall consumer. We see its consumption directly related to each region's different consumption growth in apparel and footwear for the future, as the number of focused performers to increase at the forecasted growth rate of each region's population between 15 and 39 years, according to the United Nations.

We forecasted a 3% CAGR for Under Armour's wholesale revenues for the period 2019-2024.

Exhibit 35: Weights in net revenues (in % of total)



Source: Company data, Analysts' estimates

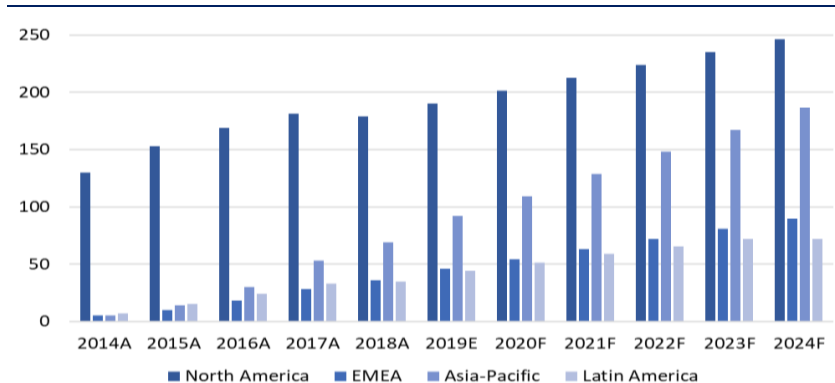
We assumed the number of brand and factory stores as driver for the DTC retail channel.

The direct to consumer is increasing its relevance as it accounted for 31% and 35% of Under Armour's net revenues in 2014 and 2018, respectively. We divided this channel into DTC retail and DTC digital. Regarding the retail, we used the number of houses (exhibit 36) as driver for demand and revenues per house as a driver for price. The company owns both brand and factory houses globally. Factory house stores serve an important role in overall inventory management as the company sells a significant portion of excess through this channel, especially discontinued and out-of-season products. Through brand house stores, consumers can experience the full premium expression of the brand while having broader access to performance products. In 2018, UA had 179 houses in North America and 140 houses internationally. Our forecasts for the number of stores are derived from the company's expectations about house openings per geography: UA intends to have 235 and 320 houses in North America and in the international business by 2023, respectively. We see the international business

growing at a higher pace in brand and factory stores than North America, with a particular emphasis for China that we see opening 20 house stores per year. We believe that the revenues per house will increase as the company opens more houses, growing at the average growth rate of the consumer spending of clothing and footwear over the last 10 years.

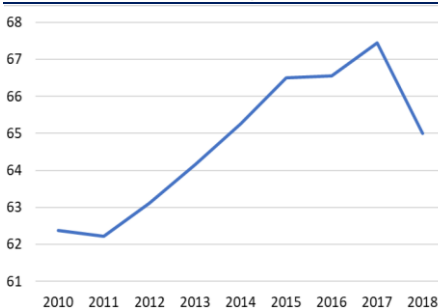
We forecast a 12% 2019-2024 CAGR for Under Armour's DTC retail channel.

Exhibit 36: Brand and factory house stores per region



Source: Company data, Analysts' estimates

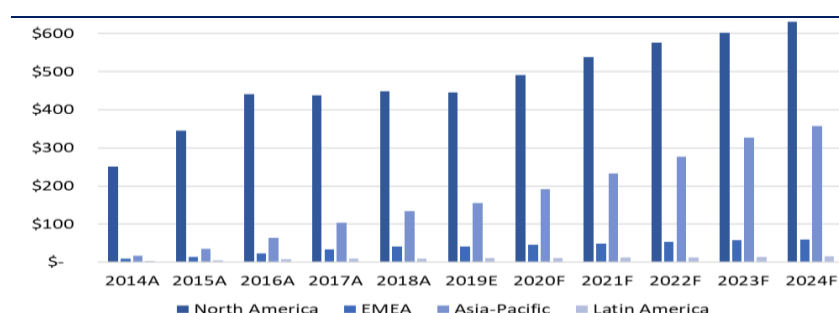
Exhibit 37: Latin America household consumption expenditure (in % of GDP)



Source: World Development Indicators

The DTC digital revenues are generated by Under Armour's e-commerce sites globally. The company has 2 websites in North America, 15 in EMEA, 14 in Asia-Pacific and 3 in Latin America. We see the digital business as a key driver for UA's growth. We expect the DTC digital to grow at the forecasted e-commerce sales growth in each region by eMarketer. We see Asia-Pacific as the fastest-growing region in the digital business, as the e-commerce spending is expected to triple by 2025, in a study made by Facebook and Bain & Company. Also, we see Latin America's growth mostly driven by the digital sector and the positive future prospects regarding consumers' disposable household income (exhibit 37), expected to grow 22% by 2030²⁸, leading to an increase in middle class growth and final consumption expenditure. Overall, we forecast a 2019-2024 CAGR of 10% for the digital channel.

Exhibit 38: DTC digital net revenues (in \$ million)



Source: Company data, Analysts' estimates

²⁸ Source: Under Armour Investor Day 2018

Licensing was forecasted based on the company's intentions regarding each region's licensing agreements.

Licensing revenues have the particularity of being of extremely difficult to estimate because the conditions of the licensing contracts are not publicly available. As the past licensing revenues grew at the same % of net revenues, we believe it is driven by the same conditions that drive total revenues. Since it represents a small share of UA's revenues, we assumed it to be constant based on the firm's expectations. For North America, we considered the licensing revenues to continue the trend to be 2% of the region's total net revenues. For EMEA, the company does not intend to have licensing revenues, whereas for Asia-Pacific²⁹, Under Armour wants to reduce the 6% of the region's net revenues to 2%. Finally, for Latin America, the company intends to start on having revenues that come from the licensing channel, thus we assumed it to be constant and equal to 1% of the region's net revenues for the period 2019-2024.

Exhibit 39: Fitness Apps acquisition price (in \$ million)

APP	ACQUISITION PRICE
MapMyFitness	150
MyFitnessPal	475
Endomondo	85

Source: Bloomberg

In the Connected Fitness business Under Armour offers digital fitness subscriptions as well as digital advertising through its apps. MapMyFitness (acquired in 2013) offers the fitness community a way to record and store their fitness activities. MyFitnessPal (acquired in 2015) provides a way to track its users' nutritional information. Endomondo (acquired in 2015) works as personal fitness trainers to be used for several sports activities. With 250 million subscriptions in 2018³⁰, the Connected Fitness business line is, strategically, one of the most important for Under Armour, regardless the small share of revenues it has. It allows the firm to collect data from customers and use it in order to better understand their preferences, so the company can focus its R&D investment creating products attractive to consumers. This allows the firm to manage its inventories more efficiently by reducing the quantity of unsold products. In addition, it allows UA to create products that connect with its applications, creating synergies between its different business lines. Two examples are the UA HOVR running shoe and ArmourBox (mentioned in the Innovation sector). In conclusion, the Connected Fitness sector has positive synergies with all other sectors that should not be disregarded at all. For the Connected Fitness, our main assumption was that Under Armour will maintain its market share on the Fitness Apps market and, therefore, will grow at the same rate as the market. We took statista's forecasts for the Fitness App revenues and assumed the same market share for this business line: 5.3%. We believe the Fitness App market has a huge growth potential due to the increasing awareness for the importance of an

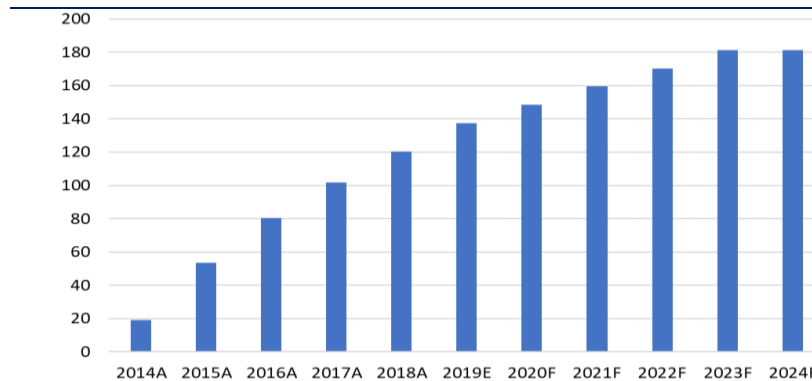
UA uses Connected Fitness to collect data from its customers and to create more attractive products based on their preferences.

²⁹ Licensing revenues are generated by Dome Corporation in Asia-Pacific

³⁰ Source: Under Armour investor day 2018

active and healthy lifestyle. We forecast a 6% 2019-2024 CAGR for the Connected Fitness business.

Exhibit 40: Connected Fitness net revenues (in \$ million)

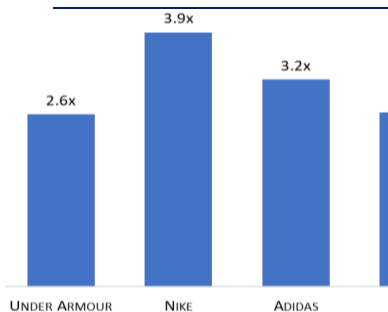


Source: Company data, Analysts estimates

▪ Gross Margin

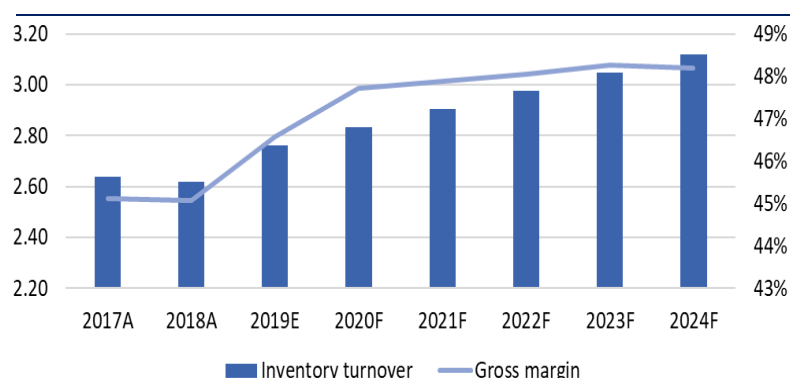
Under Armour's supply chain transformation over the past three years of restructuring can create sustainable opportunities for the company to expand its gross margin, a critical part of its business. Under Armour's gross margin has been decreasing on a yearly basis since 2014 to 2018, with values of 49.03% and 45.07%, respectively. As previously explained, an efficient inventory management is crucial for the gross margin. The number of inventory that the company needs to sell off-price or promoted is reducing as net revenues continues to increase. Also, we believe that Under Armour's expansion in the DTC channel will allow the company to increase its gross margin by getting a higher control over the selling price. We see the inventory levels to grow at 50% of Under Armour's net revenues growth and the inventory turnover increase, reaching a value of 3.12 (maximum of the last 5 years) by 2024 as UA has one of the smallest turnovers when comparing to its competitors. Thus, we see Under Armour's gross margin to increase yoy and to potentially reach the 48% target by 2023.

Exhibit 41: Inventory turnover



Source: Bloomberg

Exhibit 42: Inventory turnover vs. Gross margin (in %)



Source: Company data, Analysts estimates

▪ Operating margin

Under Armour's operating margin, similarly to the gross margin, has been decreasing yoy since 2014 to 2018, with a particular emphasis for 2018 when it reached 48 negative basis points due to an operating loss of \$25 million.

The company's selling, general and administrative expenses (SG&A) have been increasing in percentage of net revenues in the past few years, from 38% in 2014 to 42% in 2018. Under Armour divides SG&A into marketing and other costs. As it is Under Armour's intention to become one of the market leaders, we believe it is crucial for the firm to invest in marketing to increase its brand awareness. Therefore, we forecast UA's marketing expenses to converge to the average of its two main competitors, Nike and Adidas, to 11.4% of revenues. This forecast is in line with UA's target to have marketing expenses between 10% and 12% of revenues and reinvest in marketing some of the costs saved from the restructuring plan.³¹ Other costs in SG&A include the expenses related to DTC expansion and internationalization, for which we assumed last year's value of 32%. Being so, we expect SG&A to grow at a 6% 5-year CAGR from 2019 to 2024. The operating margin is expected to increase on a yearly basis and reach 5% in 2023. Hence, we believe Under Armour's expectations of having a low double-digit operating margin by 2023 are too optimistic.

We believe UA's marketing expenses will converge to its competitors' (in % of revenues).

Other costs include the expenses with DTC expansion and internationalization, crucial for UA's future growth.

▪ Debt to Equity ratio

Under Armour's debt englobes short term, long term debt as well as operating lease liabilities, that recently started to be reported on the firm's Balance Sheet.

The company has been reducing its debt (excluding lease liabilities) during its restructuring process, reporting a D/E ratio of 40% and 36% in 2016 and 2018, respectively. This reduction in debt coincided with S&P's rating downgrade to BB in the beginning of 2017,³² as companies after a downgrade, especially below investment rating, tend to reduce leverage.³³ On the other hand, it is Under Armour's intention to grow to the same level as its main competitors. Even though the company has been reducing its debt since 2017, we believe that, ended its restructuring period, and with improvements on results, the company's D/E ratio will converge to its competitors' average of 66%, as the company will need to increase its leverage to find investment growth opportunities.

As the company grows, we believe UA's credit metrics will improve and allow its leverage to converge to its competitors'.

³¹ Source: Under Armour 2018 Investor Day.

³² Townsend, Matthew and Boston, Claire. 2017. "Under Armour Credit Rating Cut to Junk by S&P Amid Slowdown", *Bloomberg*. February 1. <https://www.bloomberg.com/news/articles/2017-02-01/under-armour-s-credit-rating-cut-to-junk-by-s-p-amid-slowdown>

³³ Darren J. Kisgen, 2009. "Do Firms Target Credit Ratings or Leverage Levels?"

Cost of Capital

Exhibit 43: WACC calculation

WACC Calculation	
Target Capital Structure	
Debt to Equity Ratio	66.3%
Debt to Value	39.9%
Equity to Value	60.1%
Cost of Equity	
Risk-free rate	1.8%
Market risk Premium	5.7%
Levered Beta	0.90
Cost of Equity	6.9%
Cost of Debt	
Credit rating	Baa2
Recovery rate	47.9%
Loss given Default	52.1%
Default probability	2.2%
Yield to Maturity	3.6%
Cost of Debt	2%
Taxes	21.0%
After Tax Cost of Debt	1.9%
WACC	4.90%

Source: Analysts estimates

In order to calculate the weighted average cost of capital (WACC), we considered as inputs the cost of equity, cost of debt and target Debt to Equity ratio.

The cost of equity was calculated through the Capital Asset Pricing Model, the CAPM. This model has as inputs the risk-free rate, a market risk premium and a beta. For the risk-free rate we assumed the 10-year U.S. government bond yield of 1.79%. For the market risk premium we considered the United States risk premium recommended by Damodaran as of July 2019, of 5.67%. Lastly, our beta was estimated based on Under Armour's comparables: Nike, Adidas and Puma. For each we regressed the company's stock returns against the S&P 500 Index to determine the levered betas. Then, using each company's current Debt to Equity ratio, we were able to reach the unlevered betas. As previously stated, we believe that UA's target Debt to Equity ratio will converge to its competitors', thus, we assumed a D/E of 66.25%. Using this target, we computed the relevered beta reaching a value of 0.90. Finally, we reached a cost of equity of 6.9%.

The cost of debt has as inputs the loss given default (LGD), the probability of default and the company's yield to maturity. For the loss given default we assumed a value of 52.1%, since it is the one considered by Moody's as the average between 1987 and 2017. The probability of default was also taken from Moody's as the average cumulative default rates for the firms with Baa2 rating, as it is Under Armour. The company's yield to maturity was taken from Bloomberg and equal to 3.59%.

With all the inputs calculated, we got a weighted average cost of capital of 4.90%

Sensitivity analysis

We performed a sensitivity analysis of UA's target price regarding the WACC and the terminal growth rate.

We performed a sensitivity analysis to test two of our major valuation inputs: the WACC and the terminal growth rate. The WACC is crucial as it is the rate that discounts the company's cash flows, and the terminal growth rate as it stands for a perpetual rate. We can see that the target price is very sensitive to both the discount rate and to the perpetual growth rate, changing our recommendations depending on the new price. Through this analysis, we reached a maximum target price of \$88.62 and a minimum target price equal to \$14.26.

Exhibit 44: Sensitivity analysis

		WACC				
Growth Rate		4.5%	4.7%	4.9%	5.1%	5.3%
	3.4%	24.36	20.66	17.95	15.88	14.26
	3.6%	29.57	24.23	20.54	17.85	15.80
	3.8%	37.80	29.40	24.09	20.43	17.75
	4.0%	52.79	37.59	29.24	23.96	20.32
	4.2%	88.62	52.49	37.38	29.07	23.83

Source: Analysts estimates

Scenario Analysis

Under Armour's revenues are subject to several factors that do not only depend on the company. To a better understanding on UA and its stock's sensitivity to its drivers, we created different scenarios in addition to the base case.

▪ Marketing & CapEx

Changes in marketing expenses and CapEx would impact the company's target price and our recommendation.

Marketing expenses and Capital Expenditures (CapEx) are crucial items when it comes to Under Armour's valuation.

Our forecasts for CapEx and marketing expenses were based on our revenues' estimations. However, a sudden increase or decrease in those captions would impact the final price and our recommendation. We also have to keep in mind that UA's managers defined as target for the CapEx to be between 3% and 5% of revenues, and marketing expenses to be between 10% and 12% of revenues.

For these scenarios, we are assuming that only these two variables change, while everything else, including revenues, remains constant. This will happen if the expenses necessary for an investment, such as a new brand house or a sponsorship contract, are different than the expected.

For the marketing costs, we believe a change in the expenses with sponsorship contracts could impact the necessary investment for UA to be associated with its ambassadors. Sponsorship contracts are an important part of marketing expenses of any sportswear firm, as these tend to benefit when associated with the best sport practitioners. The competition for those athletes could drive up the price of their contracts, increasing the marketing expenses. On the other hand, if the price of sponsorship contracts decreases, marketing expenses can be reduced as % of UA's revenues. For our base case, as previously stated, we assumed constant marketing expenses equal to the competitors' average of 11.42% of net revenues.

Our base case assumes marketing as 11.42% of UA's net revenues.

Due to the firm's strategy of investing in DTC retail, we believe an important source of capital expenditures in the future might be in real estate. Therefore, changes in the real estate market will impact UA's CapEx. According to the UBS Real Estate Bubble Index, several cities are nowadays overvalued, with the

We believe CapEx will remain relatively constant in % of revenues and will not return to the significantly high values recorded up to 2017.

examples of Hong Kong (UA's headquarters in Asia-Pacific), London and Amsterdam (UA's headquarters in EMEA). If in the future the market corrects the real estate prices in these cities, the firm would acquire the same properties at a lower price, therefore decreasing CapEx. If the prices on those cities continue to increase, then we believe the CapEx would increase relatively to the revenues. For our base case, we assumed CapEx equal to 3.91% of net revenues, based on the last three years in which Under Armour faced a restructuring process.

In our high expenses scenario, we assumed an increase in both Marketing expenses and CapEx to 12% and 5% of revenues, respectively, reaching a target price of \$11.02, changing our recommendation to SELL. In our low expenses scenario, we assumed a decrease in both marketing and CapEx to 10% and 3%, respectively. In this case, our target price would increase to \$54.58, a BUY recommendation (exhibit 45).

Exhibit 45: Marketing & CapEx scenarios

Scenario	High Expenses	Low Expenses
Marketing	12%	10%
CapEx	5%	3%
Target Price	\$ 11.02	\$ 54.58
Recommendation	SELL	BUY

Source: Analysts estimates

A Republican defeat in the next presidential elections could lead to an increase in tax rate, negatively affecting US firms' earnings.

▪ U.S. Presidential elections

We believe that an important source of risk is the outcome of the United States presidential elections in 2020 as this is Under Armour's main region in which it operates. A simulation from Moody's gives Donald Trump the probability of 60% of winning the next presidential elections.³⁴ In case of a democratic victory, we believe the value of the new corporate tax rate will increase. Joe Biden proposes to raise it to 28%, while Elizabeth Warren, Bernie Sanders and Pete Buttigieg intend to re-raise it back to 35%. According to a pool of The New York Times, Joe Biden is leading the voting intentions with 27%, followed by Bernie Sanders with 19%³⁵. Since Trump took office in the beginning of 2016 and the new corporate tax rate was adopted in 2018, we assume it would also take two years for the new democratic president to increase the tax rate. So, the new tax rate would be adopted in 2023. Both scenarios would change our recommendation. In Tax Rate 28% scenario, our target price decreases to \$22.09, changing our recommendation to HOLD. In Tax Rate 35%, our target price decreases further to \$20.08, a SELL recommendation (exhibit 46).

Exhibit 46: U.S. Presidential elections scenarios

Scenario	Tax Rate 28%	Tax Rate 35%
Tax Rate	28%	35%
Target Price	\$ 22.09	\$ 20.08
Recommendation	HOLD	SELL

Source: Analysts estimates

³⁴ Cox, Jeff. 2019 "Trump is on his way to an easy win in 2020, according to Moody's accurate election model", *CNBC*, October 15. <https://www.cnn.com/2019/10/15/moodys-trump-on-his-way-to-an-easy-2020-win-if-economy-holds-up.html>

³⁵ Lee, Jasmine; Daniel, Annie; Lieberman, Rebecca; Migliozi, Blacki; Burns, Alexander. 2019. "Which Democrats Are Leading the 2020 Presidential Race?", *The New York Times*. December 20. <https://www.nytimes.com/interactive/2020/us/elections/democratic-polls.html>

Financial Statements

Balance sheet

<i>In \$m</i>	2014A	2015A	2016A	2017A	2018A	2019E	2020F	2021F	2022F	2023F	2024F
Current Assets	1,549	1,499	1,965	2,338	2,594	3,190	3,583	3,849	4,211	4,530	4,928
Cash and cash equivalents	593	130	250	312	557	1,287	1,514	1,754	1,957	2,244	2,497
Accounts receivable, net	280	434	623	610	653	635	746	723	833	814	915
Inventories	537	783	917	1,159	1,019	1,030	1,067	1,101	1,134	1,167	1,196
Prepaid expenses and other current assets	87	152	175	257	364	238	255	271	287	304	319
Deferred Income Taxes	52	0	0	0	0	0	0	0	0	0	0
Property and equipment, net	306	539	804	886	827	814	846	885	929	977	1,027
Operating leases right-of-use assets	0	0	0	0	0	598	642	683	723	766	804
Goodwill	123	585	564	556	546	0	0	0	0	0	0
Intangible assets, net	26	76	64	47	42	38	35	32	30	29	27
Deferred income taxes	34	92	137	83	112	112	112	112	112	112	112
Other long term assets	57	76	110	97	124	110	118	125	133	141	148
Total Assets	2,095	2,866	3,644	4,006	4,245	4,862	5,336	5,687	6,138	6,553	7,046
Liabilities and Stockholder's Equity											
Current liabilities	422	479	686	1,060	1,316	1,390	1,528	1,583	1,714	1,774	1,902
Revolving credit facility, current	0	0	0	125	0	0	0	0	0	0	0
Accounts payable	210	200	410	561	561	543	616	613	685	683	755
Accrued expenses	148	193	209	297	340	331	355	378	400	424	445
Customer refund liability	0	0	0	0	301	307	330	351	372	393	413
Current maturities of long term debt	29	42	27	27	25	21	26	28	31	34	37
Operating lease liabilities	0	0	0	0	0	126	135	144	152	161	169
Other current liabilities	35	43	40	50	88	61	65	70	74	78	82
Long term debt, net of current maturities	255	624	790	765	704	603	726	793	870	958	1,055
Other long term liabilities	68	95	137	162	208	156	167	178	188	199	209
Operating lease liabilities, non-current	0	0	0	0	0	586	628	668	708	749	787
Total liabilities	745	1,198	1,613	1,988	2,228	2,735	3,049	3,222	3,480	3,681	3,953
Total Stockholder's Equity	1,350	1,668	2,031	2,019	2,017	2,127	2,287	2,465	2,658	2,872	3,093

Income statement

<i>In \$m</i>	2014A	2015A	2016A	2017A	2018A	2019E	2020F	2021F	2022F	2023F	2024F
Net revenues	3,084	3,963	4,833	4,989	5,193	5,297	5,683	6,045	6,402	6,778	7,117
Cost of goods sold	1,572	2,058	2,585	2,738	2,853	2,830	2,971	3,150	3,327	3,507	3,687
Gross profit	1,512	1,906	2,249	2,251	2,340	2,467	2,712	2,895	3,076	3,271	3,430
% Gross Margin	49%	48%	47%	45%	45%	47%	48%	48%	48%	48%	48%
Selling, general and administrative expenses	1,158	1,497	1,831	2,100	2,182	2,276	2,442	2,598	2,751	2,913	3,058
Restructuring and impairment charges	0	0	0	124	183	0	0	0	0	0	0
Income (loss) from operations	354	409	417	28	(25)	190	270	297	324	358	372
% Operating Margin	11%	10%	9%	1%	0%	4%	5%	5%	5%	5.29%	5%
Interest expense, net	(5)	(15)	(26)	(35)	(34)	(25)	(31)	(33)	(37)	(40)	(44)
Other expense, net	(6)	(7)	(3)	(4)	(9)	(7)	(8)	(8)	(9)	(10)	(10)
Income (loss) before income taxes	342	387	388	(10)	(68)	158	231	256	278	309	317
Income tax expense (benefit)	134	154	131	38	(21)	48	71	78	85	94	97
Income from equity method investment	0	0	0	0	1	1	1	1	1	1	1
Net income (loss)	208	233	257	(48)	(46)	110	161	178	194	215	221

Cash-Flow Statement

in \$m

	2014A	2015A	2016A	2017A	2018A	2019E	2020F	2021F	2022F	2023F	2024F
Core Result	\$ 344	\$ 383	\$ 398	\$ 96	\$ 162	\$ 188	\$ 267	\$ 294	\$ 321	\$ 355	\$ 368
Core Taxes	\$ 135	\$ 153	\$ 134	\$ 71	\$ 39	\$ 56	\$ 80	\$ 88	\$ 96	\$ 106	\$ 110
NOPLAT	\$ 210	\$ 230	\$ 264	\$ 25	\$ 122	\$ 132	\$ 187	\$ 206	\$ 225	\$ 248	\$ 258
Depreciation	\$ 64	\$ 87	\$ 132	\$ 166	\$ 176	\$ 193	\$ 190	\$ 197	\$ 207	\$ 217	\$ 228
Amortization	\$ 9	\$ 14	\$ 13	\$ 8	\$ 6	\$ 6	\$ 5	\$ 5	\$ 5	\$ 4	\$ 4
Operational Cash Flow	\$ 282	\$ 331	\$ 408	\$ 199	\$ 304	\$ 331	\$ 382	\$ 408	\$ 436	\$ 469	\$ 490
Invested Capital - Fixed Assets	\$ 306	\$ 539	\$ 804	\$ 886	\$ 827	\$ 814	\$ 846	\$ 885	\$ 929	\$ 977	\$ 1,027
Gross CAPEX	\$ 233	\$ 266	\$ 82	\$ (59)	\$ (13)	\$ 32	\$ 39	\$ 44	\$ 48	\$ 50	\$ 50
Net CAPEX	\$ 320	\$ 397	\$ 247	\$ 117	\$ 180	\$ 222	\$ 236	\$ 250	\$ 265	\$ 278	\$ 278
Invested Capital - NWC	\$ 786	\$ 1,287	\$ 1,450	\$ 1,614	\$ 1,631	\$ 1,518	\$ 1,623	\$ 1,664	\$ 1,762	\$ 1,806	\$ 1,890
Δ NWC	\$ 502	\$ 163	\$ 164	\$ 17	\$ (113)	\$ 105	\$ 41	\$ 98	\$ 44	\$ 84	\$ 84
Δ Other Assets excl Intangibles	\$ 462	\$ (21)	\$ (7)	\$ (10)	\$ 53	\$ 44	\$ 41	\$ 41	\$ 43	\$ 39	\$ 39
Δ Intangibles + Amortization	\$ 63	\$ 2	\$ (9)	\$ 1	\$ 2	\$ 2	\$ 2	\$ 3	\$ 3	\$ 3	\$ 3
Δ Other Liabilities	\$ 55	\$ 15	\$ 99	\$ 382	\$ (30)	\$ 52	\$ 48	\$ 48	\$ 50	\$ 45	\$ 45
Investment Cash Flow	\$ (1,292)	\$ (526)	\$ (296)	\$ 256	\$ (152)	\$ (322)	\$ (272)	\$ (344)	\$ (304)	\$ (359)	\$ (359)
Free Cash Flow from Operations	\$ (961)	\$ (117)	\$ (97)	\$ 560	\$ 179	\$ 60	\$ 136	\$ 92	\$ 165	\$ 131	\$ 131
After tax non core result	\$ (17)	\$ (29)	\$ (7)	\$ (16)	\$ (134)	\$ (3)	\$ (4)	\$ (4)	\$ (4)	\$ (4)	\$ (5)
Change in long term liabilities	\$ 26	\$ 40	\$ 24	\$ 47	\$ (53)	\$ 11	\$ 10	\$ 10	\$ 11	\$ 9	\$ 9
Change in non operating assets	\$ 19	\$ 34	\$ (14)	\$ 27	\$ (15)	\$ 8	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7
Non-operating FCF	\$ (22)	\$ (0)	\$ 22	\$ (113)	\$ (42)	\$ (0)	\$ (0)	\$ (1)	\$ (1)	\$ (2)	\$ (2)
FREE CASH FLOW	\$ (982)	\$ (118)	\$ (76)	\$ 447	\$ 137	\$ 59	\$ 136	\$ 91	\$ 164	\$ 129	\$ 129
Financial Result	\$ (2)	\$ 1	\$ (7)	\$ (43)	\$ (36)	\$ (19)	\$ (23)	\$ (25)	\$ (27)	\$ (30)	\$ (33)
Net Financial Assets	\$ 303	\$ (563)	\$ (575)	\$ (671)	\$ (215)	\$ (96)	\$ (59)	\$ 51	\$ 115	\$ 249	\$ 346
Investments in NFA	\$ (865)	\$ (12)	\$ (96)	\$ 457	\$ 119	\$ 37	\$ 111	\$ 64	\$ 134	\$ 96	\$ 96
Net transactions with shareholders	\$ 116	\$ 113	\$ 22	\$ 45	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Financing Cash Flow	\$ 982	\$ 118	\$ 76	\$ (447)	\$ (137)	\$ (59)	\$ (136)	\$ (91)	\$ (164)	\$ (129)	\$ (129)

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Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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A Work Project presented as part of the requirements for the Award of a Master Degree in
Finance from the NOVA – School of Business and Economics.

MOVING FROM DEFENSE TO
OFFENSE
UNDER ARMOUR

FREDERICO MARIA PINTO
PEREIRA DOS SANTOS – 33970

A Project carried out on the Master in Finance Program, under the supervision of:

Filipa Castro

JANUARY 6, 2020

Abstract

To perform a sensitivity analysis on the target price considering a valuation's major inputs is crucial to understand and to prepare investors for all possible scenarios. Being so, I performed a sensitivity analysis on Under Armour's target price considering a range of possibilities regarding UA's number of house stores (brand and factory houses) in North America by 2023 and the focused performer's annual spending in the wholesale channel with the brand.

The target price is sensitive to these two inputs and would impact the recommendation on the main report.

Keywords

Analysis, Restructuring, Perform, Scenarios

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UNDER ARMOUR INC**INDIVIDUAL REPORT***SPORTSWEAR*

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About Under Armour

Under Armour, Inc. is a sportswear company that develops, markets and distributes sports related performance products based in Maryland, the U.S. The company sells a broad range of apparel, footwear and accessories in North America, Europe, Middle East and Africa (EMEA), Asia-Pacific and Latin America. UA distributes its products through the wholesale, direct to consumer and licensing channels. Also, its Connected Fitness business line contains the MapMyFitness, MyFitnessPal and Endomondo apps, that have been growing at a fast pace over the last few years.

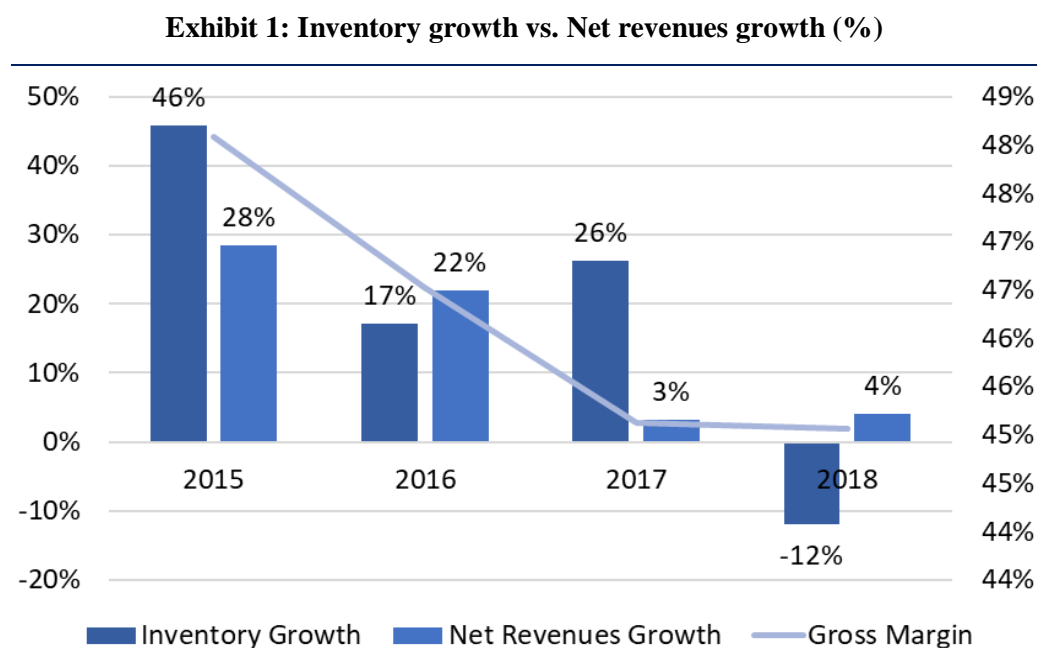
SWOT Analysis

Ended its three-year restructuring process caused by a sluggish North American business and inefficient inventory management, Under Armour is now going to follow a strategic growth plan aiming the period from 2020 to 2023. Being so, I believe it is crucial to perform a SWOT analysis to understand the company's positioning in the market.

Strengths: Under Armour's main strength relies on having a positive yoy growth in total net revenues regardless the problems that the company is facing. Although the North American business is indeed getting weaker, Under Armour is being able to more than compensate it with its international expansion and presence, recording consecutive positive growth rates

regarding EMEA, Asia-Pacific and Latin America geographical segments. Last quarter (3Q 2019), revenue was up 9% in EMEA, 4% in Asia-Pacific and down 4% in Latin America.

Weaknesses: Under Armour had, in the last couple of years, an inventory growth higher than the net revenues growth, leading to an accumulation of unsold inventory and consequent decrease in the company's gross margin (exhibit 1). Also, the UA's inventory turnover is low when compared to its competitor's, meaning that it takes longer for Under Armour to convert its inventory into net revenues. This can be also seen as an opportunity, since the company is now focusing on a better inventory management in order to increase efficiency and operating margins.



Source: Company data

Opportunities: the focused performer and the international expansion must be seen as the main drivers for Under Armour to create value. These drivers were incorporated the valuation model within the forecasts of the wholesale and DTC retail channel, respectively.

Threats: Under Armour's main threat is related to the fact that the company is part of a very competitive and fragmented industry, in which operate two major companies: Nike and Adidas. Thus, it becomes difficult to gain market share to its competitors and to gain exposure when it comes to Under Armour's marketing, brand image and consumer awareness worldwide.

Strategies Overview

Under Armour has been adapting to the market, to economic conditions and to consumer preferences by establishing and following strategies in order to overcome problems and to drive itself to the company's ultimate goal: sustainable growth.

The period between 2017 and 2019 was a period of restructuring, in which Under Armour's strategy was to "Protect This House". According to the company, UA had clear targets for what would be ultimate goal for each year: to get organized in 2017, to get to work in 2018 and to execute in 2019. Under Armour listened to 22,000 consumers worldwide to strengthen its brand positioning by reinforcing its mission and vision, and to identify its target consumer. The company's renewed consumer centric approach understands the consumer needs that vary according to specific contexts and creates performance solutions for each scenario that would ultimately fulfil Under Armour's mission - to Make You Better. To comprehend that each consumer tells a different story and has different necessities alongside with a disciplined operating model and an overhaul of UA's go-to-market process, is indeed restructuring the company, preparing it for a sustainable growth in a near future. In 2019, UA intends to execute by driving operational efficiencies through new processes in order to reach three fundamental values: confidence, credibility and consistency.

The sportswear company intends to stabilize and right-size the inventory levels in order to increase its margins as well as continue to contract the wholesale as it focus on the expansion of the direct to consumer channel, both retail and digital. Under Armour wants to move from defense to offense to become once again a fast-growing firm within the sportswear industry.

To “Perform With Balance” is Under Armour’s strategy for the period between 2020 and 2023. In this period, the company wants to focus on performance premium distribution as it reinforces its connection to the focused performer consumer, aiming continually at both the direct to consumer retail and digital channels as well as to the international business. As previously stated, the company believes that this is the way to deliver consistent financial performance and to become a major and important player of the sportswear industry once again.

Building Scenarios

Under Armour relies heavily on its North American business, being more exposed to its domestic drivers when compared to its international segment. As I believe the international business will not suffer a slowdown in the upcoming years, the North America’s business’ vulnerability can indeed be either a threat or an opportunity for the company. Being so, I decided to perform a sensitivity analysis based on the number of houses that UA intends to open by 2023 (235 as base case), that directly influence the company’s DTC retail sales. Note that, according to UA, factory house stores serve an important role in overall inventory management as the company sells a significant portion of excess through this channel, especially discontinued and out-of-season products. Through brand house stores, consumers can experience the full premium expression of the brand while having broader access to performance products. Also, knowing that the focused performer is Under Armour’s main driver for the future, I included the annual spending of this type of consumer in North America for UA’s wholesale channel in this sensitivity analysis (\$389 as base case).

Exhibit 2: Sensitivity Analysis

		Houses North America				
Focused performer spending		231	233	235	237	239
	359	19.51	24.21	31.59	44.85	75.67
	369	18.57	22.53	28.40	38.03	56.75
	379	17.78	21.17	25.99	33.38	46.18
	389	17.10	20.05	24.09	29.99	39.42
	399	16.51	19.10	22.56	27.41	34.70
	409	15.98	18.29	21.29	25.37	31.21
	419	15.51	17.58	20.22	23.70	28.52

Source: Analyst estimates

Given a current price of \$21.85 as of 6-Jan-20, exhibit 2 contains different target prices regarding different scenarios and the correspondent recommendation: BUY – green fill, SELL – red fill, HOLD – yellow fill. Through this analysis I can conclude that Under Armour's target price for December 2020 has a high level of sensitivity to both the company's number of houses in North America by 2023 and to the focused performer spending in wholesale in 2020. The base case of the main report relies on 235 houses in North America by 2023 and \$389 spending by the focused performer: a target price equal to \$24.09, hence, a BUY recommendation.

As it is observable in exhibit 2, for the same number of house stores, the more the focused performer spends on UA's wholesale channel, the lower is the company's target price. I believe this derives from the fact that the DTC retail channel (brand and factory house stores) has higher margins than the wholesale one (focused performer). Being so, as the wholesale business increases as % of total, the margins will tend to decrease and, consequently, the target price will be reduced as well. Through this analysis, I reached a maximum price of \$75.67 (for 239 houses and a \$359 focused performer spending) and a minimum price equal to \$15.51 (for 231 houses and a \$359 focused performer spending).

